

REMARKS

Applicant is concurrently filing a Revocation and New Power Attorney and Confirmatory Assignment appointing Fish & Richardson P.C. as the agent of record for the above-identified application.

Claims 1-25 are pending in the above-identified application. Claim 1 is independent.

The examiner rejected claims 1 and 3-12 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,482,750 to Yokoi. The examiner further rejected claims 2 and 14-25 under 35 U.S.C. §103(a) as being unpatentable to Yokoi in view of U.S. Patent No. 6,335,218 to Ota et al., and further in view of U.S. Patent No. 6,008,539 to Shibata et al.

Specifically, with respect to independent claim 1, the examiner stated:

Yokoi discloses a semiconductor device with
(1) providing a semiconductor body containing a substrate (1) and at least one nitride compound semiconductor (21) disposed on the substrate (1) (see Figure 1A);
Applying a metal layer 31 to a surface of the semiconductor body (see Figure 1A); ...

Applicant respectfully disagrees with the examiner's characterization of Yokoi.

Applicant's independent claim 1 discloses a method for fabricating a semiconductor component that includes the features of "providing a semiconductor body containing a substrate and at least one nitride compound semiconductor disposed on the substrate; applying a metal layer to a surface of the semiconductor body."

In contrast, Yokoi describes a process of cleaning a semiconductor substrate (Abstract). Particularly, as shown in FIG. 1A, and as described at col. 5, lines 1-8:

As shown in FIG. 1A, a gate insulating film serving as an insulating film 2, a polycrystalline silicon film 11 (hereinafter called "polysilicon film"), a barrier metal film 21 composed of a tungsten nitride film, for example, and a tungsten film 31 are formed on the semiconductor substrate 1, in this sequence, by thermal oxidation, chemical vapor deposition (CVD) method, or physical vapor deposition (PVD) method. (pages 2-3 of the Office Action)

Thus, contrary to the examiner's contention, the film 21 is not a nitride compound semiconductor, but rather a barrier metal film composed of a tungsten nitride film. In other words, Yokoi's film 21 is a metal, not a semiconductor required by independent claim 1. As for the semiconductor substrate 1, nowhere does Yokoi describe the composition of the semiconductor substrate 1, and there is no suggestion anywhere in Yokoi that the semiconductor

substrate 1 includes a nitride compound. Applicant further notes that the other described elements of Yokoi's device, including the tungsten film 31, the polycrystalline film 11, the insulating film 2, and/or the resist pattern 51, do not include a semiconductor compound or a nitride compound. Yokoi certainly does not describe that any of these elements includes a nitride compound semiconductor.

Thus, Yokoi does not disclose or suggest "providing a semiconductor body containing a substrate and at least one nitride compound semiconductor disposed on the substrate, applying a metal layer to a surface of the semiconductor body," as required by applicant's independent claim 1. Applicant's independent claim 1 is therefore patentable over the cited art.

Claims 2-25 depend from independent claim 1 and are therefore patentable for at least the same reasons as applicant's independent claim 1.

In addition, as noted above, the examiner rejected claim 12 under 35 U.S.C. §102(e) as being anticipated by Yokoi. Specifically, the examiner stated "Yokoi discloses a semiconductor device with ... **(12)** which further comprises applying a contact metallization (see column 8, lines 51-61, Figure 3C)" (page 4 of the Office Action). Applicant respectfully disagrees.

Applicant's claim 12 recites "[t]he method according to claim 1, which further comprises applying a contact metallization." In some embodiments, applicant's contact metallization, in conjunction with applicant's metal layer, enables current to be impressed into applicant's semiconductor component during operation (see page 16, lines 16-19 of the application).

In contrast, Yokoi's FIGS. 3A-3C show a second insulating film 81 applied to the interconnection pattern 41 (which, as shown in FIGS. 3A-3C, includes the tungsten film 31, the barrier film 21, and the polycrystalline film 11). Yokoi further describes at col. 8, lines 51-57, that a first resist pattern 53 (which, presumably, is some type of polymer) is formed on the film 81, and that a contact hole 91 that extends from the surface of the film 81 to the interconnection pattern 41 is formed (the contact hole 91, as described at col. 9, lines 29-33, appears to be used to deliver cleaning compounds to apply to the tungsten film 31 at the bottom of contact hole 91). However, neither the insulating film 81, nor the first resist pattern 53 is a contact metallization.

Yokoi also describes at FIG. 3C, and col. 9, lines 1-7, that a second resist pattern 54 (which, presumably, is also some type of polymer) is formed on the internal surface of the first contact hole 91 and on the insulating film 81, and that subsequently a second contact hole 92 is formed (the contact hole 92, as described at col. 9, lines 49-59, appears to be used to deliver

cleaning compounds to apply to the insulating film 2 at the bottom of contact hole 92).

However, the second resist pattern 54 is also not a contact metallization.

Thus, contrary to the examiner's contention, Yokoi does not disclose or suggest "applying a contact metallization," as required by applicant's claim 12. Accordingly, claim 12 is patentable over the cited art.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer. Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Enclosed is a Petition for One Month Extension of Time, with the required fee of \$120. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket 12406-140001.

Respectfully submitted,

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